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Title: Photos of Lansmont PDT 80 drop test machine at Los Alamos

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Intended for: For consultations with a vendor about equipment malfunction

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PDT 80 Precision Drop Tester

Lansmont
Field-to-Lab®



The transport and distribution environment holds numerous opportunities for packages to experience impacts and/or drops. As a result, shock is transmitted both into, and throughout, a given package. The products within the packaging respond to both the amplitude and frequency characteristics of the shock. How the various packaging components mitigate that shock determines how much shock is transmitted into the product held within. Lansmont Drop Test Systems are used to perform pre-shipment testing in an effort to design and verify cost-effective, optimized protective packaging solutions.

PERFORMANCE SPECIFICATIONS

Maximum Package Weight:

Standard platen	177 lbs. (80.0 kg)
Extended platen option	150 lbs. (68.0 kg)

Maximum Package Size:

Standard platen	24.0 in. (61.0 cm) front to back
Extended platen option	36.0 in. (91.5 cm) front to back

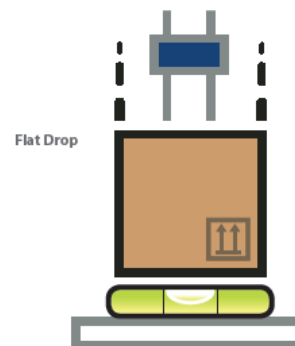
Drop Height Range:

Standard baseplate	12.0 - 72.0 in. (30.5 - 183 cm)
Slotted baseplate option	1.0 - 72.0 in. (2.5 - 183 cm)
Extended platen option	18.0 - 72.0 in. (45.7 - 183 cm)

* Extended drop height available.

FLATNESS ACCURACY

Before each drop tester is shipped, its accuracy is verified to within +/- 2 degrees.



Photos of Lansmont PDT 80 drop test machine at Los Alamos

The Los Alamos RP-SVS Radiation Protection Services group designed and constructed a drop tower facility for TA-55 support work. The drop mechanism was supplied by the Lansmont company in Monterey CA.

Los Alamos staffers Murray Moore and Yong Tao have noticed that the system is not dropping loads correctly, and they have photographed aspects of the PDT-80 model system. The first 10 photos show the platen loaded with a cylindrical steel bar. The next 10 photos are of the roller-cam mechanism in the drop tower, and the last 2 photos indicate the amount of looseness in the platen when it is being pulled by a person.

This file will be sent to the Lansmont company for consultation.

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Dec. 20, 2017



PDT 80 Precision Drop Tester

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SPECIFICATIONS

UTILITIES

Power -

Standard voltages: 110 VAC - 1 phase - 60 Hz. (10 amps)

220 VAC - 1 phase - 50 Hz. (5 amps)

Optional voltages: 100 VAC - 1 phase - 50 Hz. (10 amps)

200 VAC - 1 phase - 50 Hz. (5 amps)

100 VAC - 1 phase - 60 Hz. (10 amps)

220 VAC - 1 phase - 60 Hz. (5 amps)

200 VAC - 1 phase - 60 Hz. (5 amps)

Plant Air -

Pressure: 40 - 60 psi (2.8 - 4.1 bar)

Flow Rate: 0.5 scfm

MACHINE DIMENSIONS (standard machine)

Height: 106 in. (269 cm)

Baseplate width: 36 in. (91 cm)

Baseplate length: 55.5 in. (141 cm)

CRATE INFORMATION (standard machine)

Height: 30 in. (76 cm)

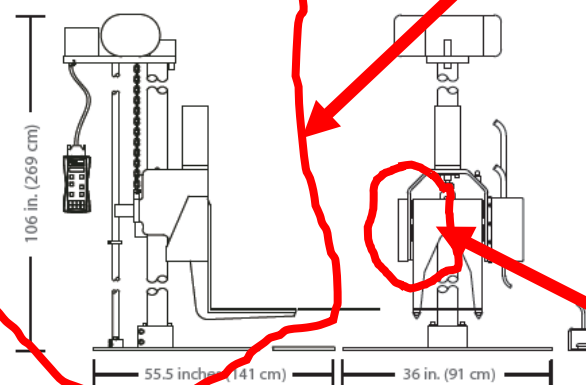
Width: 40 in. (101 cm)

Length: 111 in. (281 cm)

Shipping Weights: Gross Weight 850 lbs. (386 kg)
Net Weight 520 lbs. (236 kg)

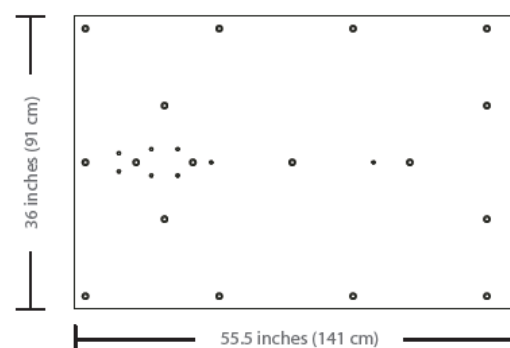
SYSTEM DRAWINGS

SIDE VIEW



FRONT VIEW

STANDARD BASEPLATE



Schematic of the platen.

Location of the roller-cams.





Double-click to go to full screen, click+click to snap to other size













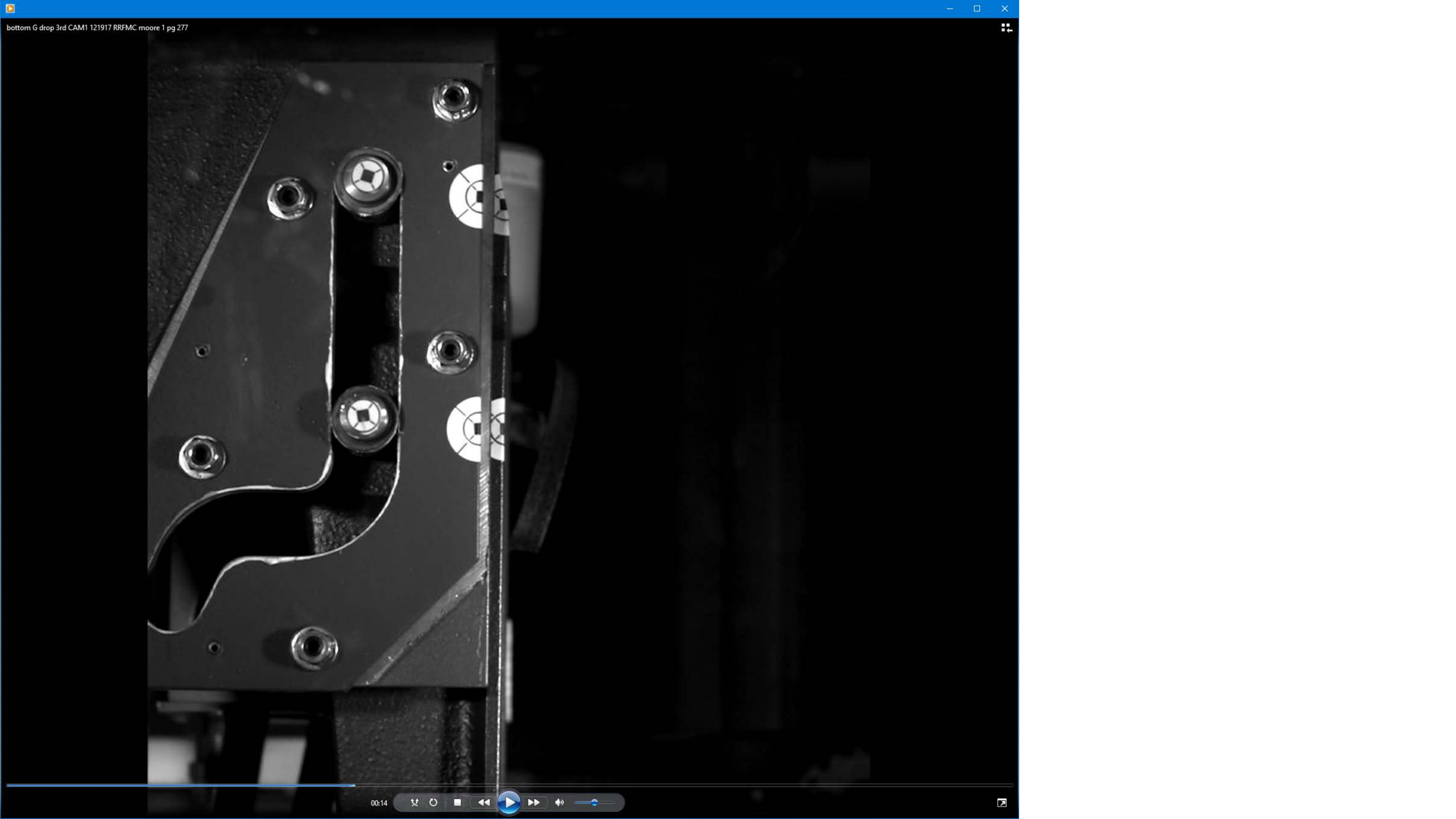


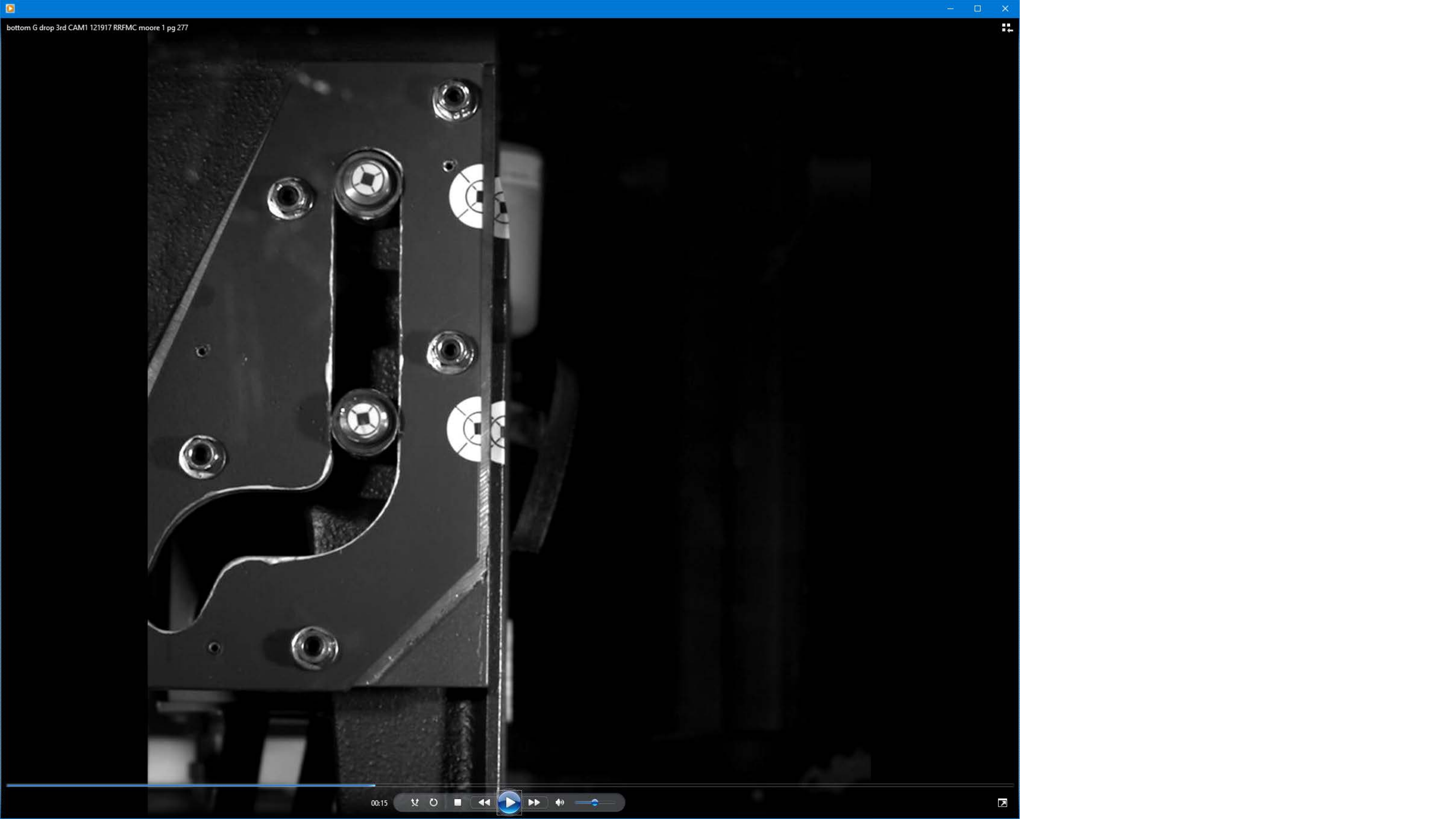
Double-click to go to full screen, ctrl+click to drag to video size



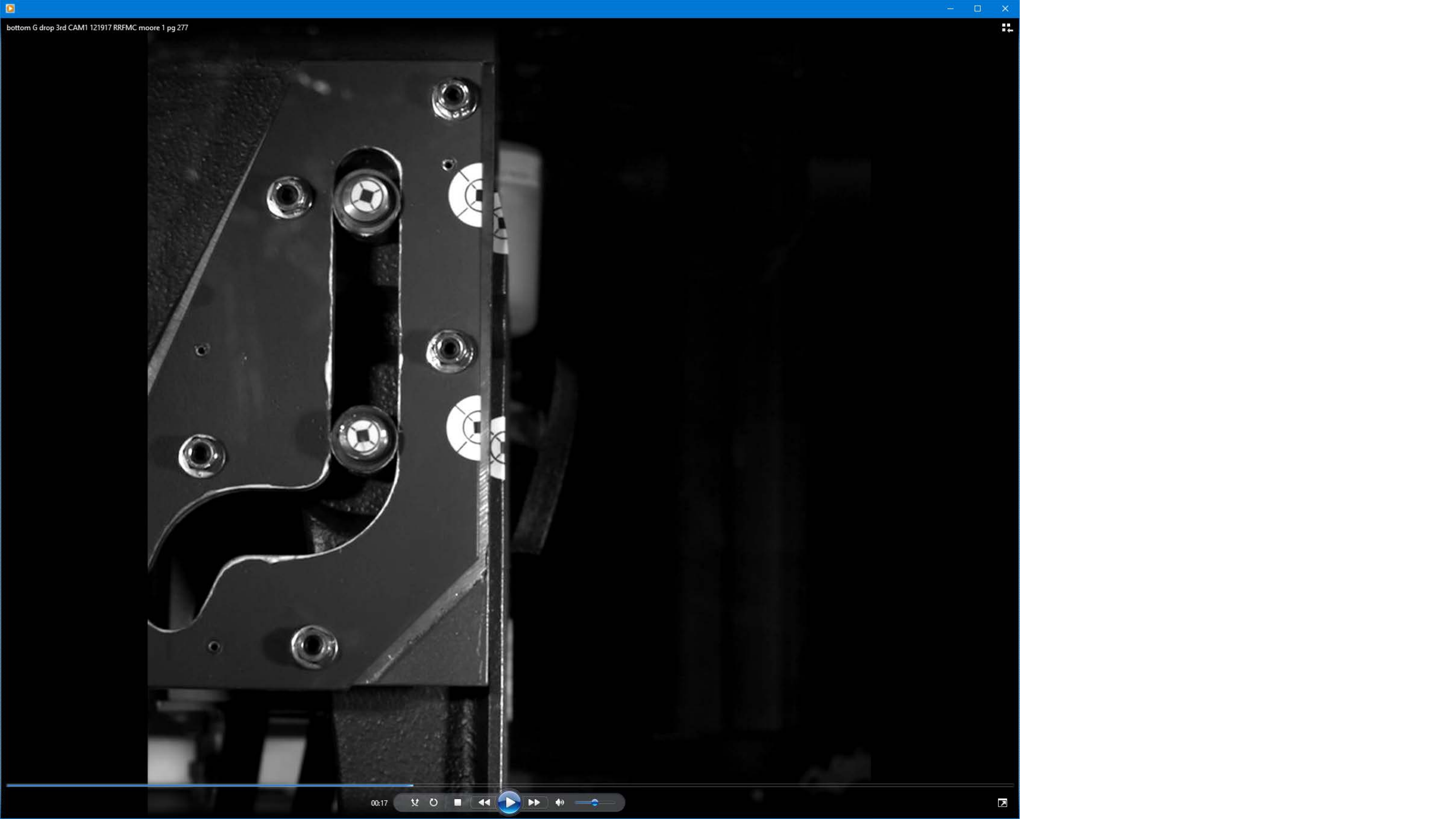






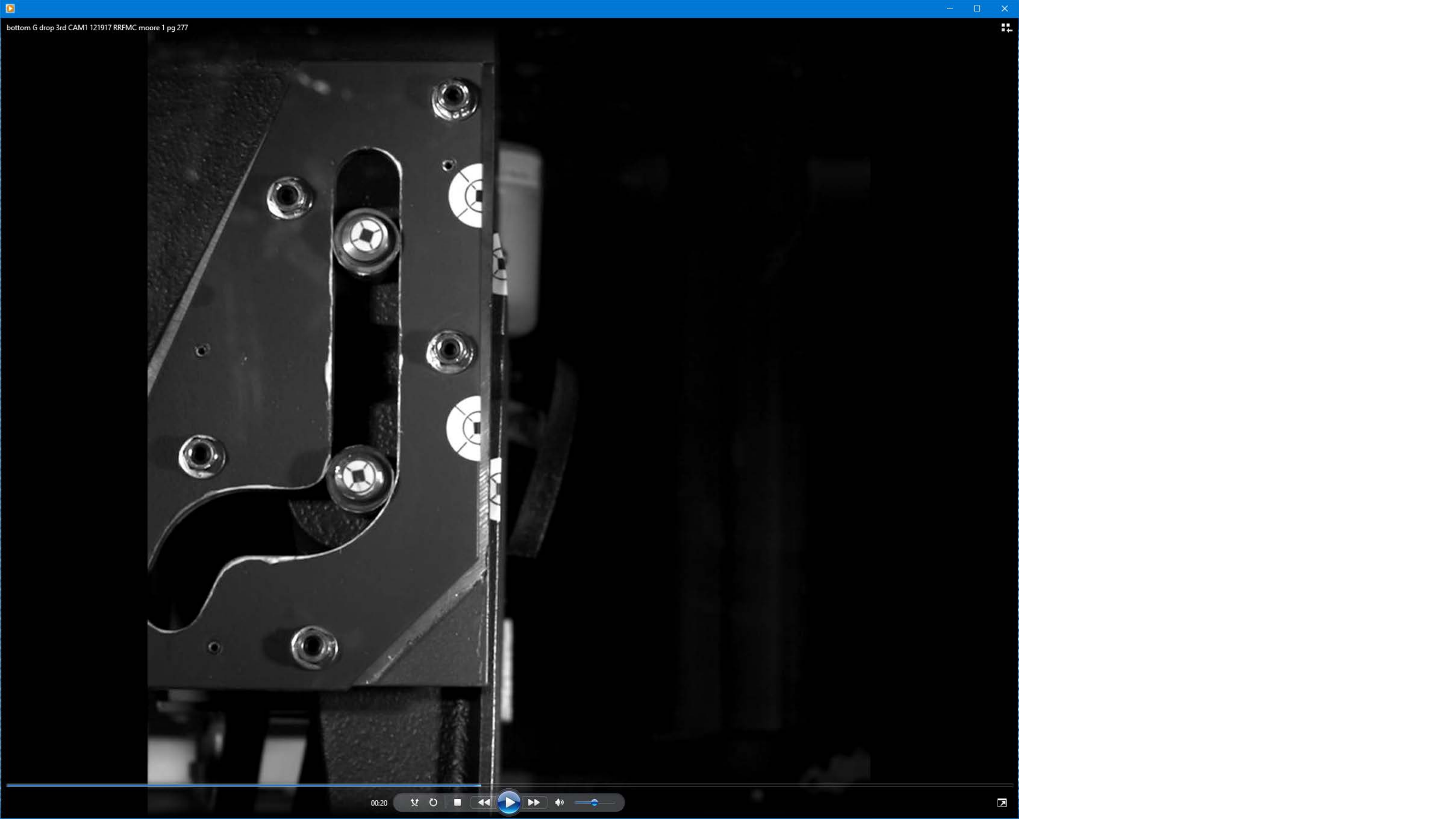




















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